

SNAPDRAGON RUST

H. C. Burnett

The serious rust disease of snapdragon, *Antirrhinum majus* L., caused by the fungus *Puccinia antirrhini* was first discovered in 1895 in California and Oregon and has been prevalent in the United States, Canada and Bermuda for many years. Outside these areas it was practically unknown until 1933, at which time it had spread with great rapidity. The first report was made from England in 1933. By 1934 it was present in 28 counties in England and in 1935 was reported in Scotland, Ireland, Holland, Denmark, Germany, Czechoslovakia Italy, and Austria. The disease became established in the Eastern Cape Province of South Africa and more recently in Egypt in 1956. Since snapdragon is a native of the Mediterranean region where the rust was hitherto unknown, it seems probable that the rust was indigenous to California on species prevalent at that time and introduced in some unknown manner into new areas where cultivated species were grown.

SYMPTOMS. Early symptoms of the rust are small, light-colored spots which occur first on the lower surface of the leaves followed by their appearance on the corresponding upper surface. The spots soon produce brown pustules in great profusion (Fig. 1). The rust pustules on the stem are somewhat elongated and may sometimes girdle the stems so that branches may die.

In some parts of the United States plants which were considered resistant to this rust were subsequently found to be susceptible. This is believed to be due to the appearance of another strain of the rust.

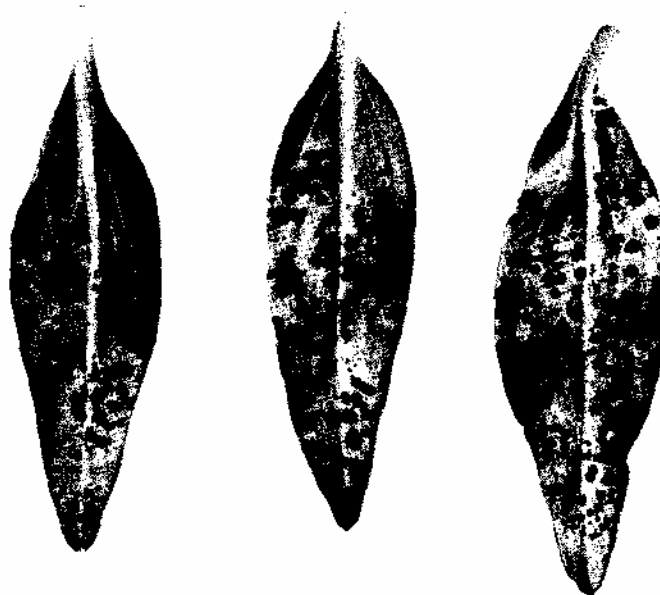


Fig. 1. Progression of development of pustules.

CONTROL. Cuttings should be grown in an area free of snapdragon rust. Consideration may be given to the use of seed in place of cuttings since seed are not likely to be carriers of the rust spores. Place plants where air circulation is good and avoid overhead watering. A thorough application of zineb-sulphur or maneb-sulphur mixture (1 lb zineb or maneb plus 2 lb wettable sulphur per 100 gal water) weekly will help control this disease. Spraying should start 2 weeks after benching. Since cool weather favors uredospore germination, attention should be given to keeping the greenhouse above 70 F.

Rust resistant snapdragons are available in most colors and should be used in preference to susceptible varieties.

Literature Cited

1. Butler, E. J. and S. G. Jones. 1961. Plant pathology. MacMillan and Co. Ltd., London. 979 p.
2. Forsberg, J. L. 1963. Diseases of ornamental plants. Univ. of Ill., Coll. of Agr. Spec. Pub. No. 3. 208 p.
3. Pirone, P. P., B. O. Dodge and H. W. Rickett. 1960. Diseases and pests of ornamental plants. The Ronald Press Co., New York. 776 p.
4. 1966 Cornell recommendations for commercial floriculture crops. Cornell Univ., Ithaca. 63 p.